

# RAW SEQUENCE LISTING

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Application Serial Number: 10/560,790A  
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**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/560,790A**

**DATE: 11/16/2006**  
**TIME: 09:43:35**

**Input Set : A:\Sequence Listing.txt**  
**Output Set: N:\CRF4\11162006\J560790A.raw**

3 <110> APPLICANT: Ghosh, Peter  
 5 <120> TITLE OF INVENTION: CONNECTIVE TISSUE DERIVED POLYPEPTIDES  
 7 <130> FILE REFERENCE: 10682.10USWO  
 9 <140> CURRENT APPLICATION NUMBER: US 10/560,790A  
 10 <141> CURRENT FILING DATE: 2005-12-15  
 12 <150> PRIOR APPLICATION NUMBER: PCT/AU2004/000788  
 13 <151> PRIOR FILING DATE: 2004-06-17  
 15 <150> PRIOR APPLICATION NUMBER: AU 2003903037  
 16 <151> PRIOR FILING DATE: 2003-06-17  
 18 <160> NUMBER OF SEQ ID NOS: 19  
 20 <170> SOFTWARE: PatentIn version 3.3  
 22 <210> SEQ ID NO: 1  
 23 <211> LENGTH: 187  
 24 <212> TYPE: PRT  
 25 <213> ORGANISM: Artificial Sequence  
 27 <220> FEATURE:  
 28 <223> OTHER INFORMATION: Partial sequence of bovine NC4 domain of Type IX collagen  
 alpha 1  
 29 chain  
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 33 Pro Arg Phe Pro Val Asn Ser Asn Ser Asn Gly Glu Asn Glu Leu Cys  
 34 1 5 10 15  
 37 Pro Lys Val Arg Ile Gly Gln Asp Asp Leu Pro Gly Phe Asp Leu Ile  
 38 20 25 30  
 41 Ser Gln Phe Gln Ile Asp Lys Ala Ala Ser Arg Arg Ala Ile Gln Arg  
 42 35 40 45  
 45 Val Val Gly Ser Thr Ala Leu Gln Val Ala Tyr Lys Leu Gly Asn Asn  
 46 50 55 60  
 49 Val Asp Phe Arg Ile Pro Thr Arg His Leu Tyr Pro Asn Gly Leu Pro  
 50 65 70 75 80  
 53 Glu Glu Tyr Ser Phe Leu Thr Thr Phe Arg Met Thr Gly Ser Thr Leu  
 54 85 90 95  
 57 Glu Lys His Trp Ser Ile Trp Gln Ile Gln Asp Ser Ser Gly Lys Glu  
 58 100 105 110  
 61 Gln Val Gly Val Lys Ile Asn Gly Gln Thr Lys Ser Val Ser Phe Ser  
 62 115 120 125  
 65 Tyr Lys Gly Leu Asp Gly Ser Leu Gln Thr Ala Ala Phe Ser Asn Leu  
 66 130 135 140  
 69 Pro Ser Leu Phe Asp Ser Gln Trp His Lys Ile Met Ile Gly Val Glu  
 70 145 150 155 160  
 73 Arg Ser Ser Ala Thr Leu Phe Val Asp Cys Asn Arg Ile Glu Ser Leu  
 74 165 170 175  
 77 Pro Ile Lys Pro Arg Gly Gln Ile Asp Val Asp  
 78 180 185

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81 <210> SEQ ID NO: 2  
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84 <213> ORGANISM: Artificial Sequence  
86 <220> FEATURE:  
87 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
89 <400> SEQUENCE: 2  
91 Lys Ser Val Ser Phe Ser Tyr Lys Gly  
92 1 5  
95 <210> SEQ ID NO: 3  
96 <211> LENGTH: 9  
97 <212> TYPE: PRT  
98 <213> ORGANISM: Artificial Sequence  
100 <220> FEATURE:  
101 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
103 <400> SEQUENCE: 3  
105 Lys Ile Met Ile Gly Val Glu Arg Ser  
106 1 5  
109 <210> SEQ ID NO: 4  
110 <211> LENGTH: 10  
111 <212> TYPE: PRT  
112 <213> ORGANISM: Artificial Sequence  
114 <220> FEATURE:  
115 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
117 <400> SEQUENCE: 4  
119 Lys Leu Gly Asn Asn Val Asp Phe Arg Ile  
120 1 5 10  
123 <210> SEQ ID NO: 5  
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125 <212> TYPE: PRT  
126 <213> ORGANISM: Artificial Sequence  
128 <220> FEATURE:  
129 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
131 <400> SEQUENCE: 5  
133 Arg Ile Glu Ser Leu Pro Ile Lys Pro Arg Gly  
134 1 5 10  
137 <210> SEQ ID NO: 6  
138 <211> LENGTH: 15  
139 <212> TYPE: PRT  
140 <213> ORGANISM: Artificial Sequence  
142 <220> FEATURE:  
143 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
145 <400> SEQUENCE: 6  
147 Lys His Trp Ser Ile Trp Gln Ile Gln Asp Ser Ser Gly Lys Glu  
148 1 5 10 15  
151 <210> SEQ ID NO: 7  
152 <211> LENGTH: 21  
153 <212> TYPE: PRT  
154 <213> ORGANISM: Artificial Sequence

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156 <220> FEATURE:  
157 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
159 <400> SEQUENCE: 7  
161 Arg Ile Gly Gln Asp Asp Leu Pro Gly Phe Asp Leu Ile Ser Gln Phe.  
162 1 5 10 15  
165 Gln Ile Asp Lys Ala  
166 20  
169 <210> SEQ ID NO: 8  
170 <211> LENGTH: 20  
171 <212> TYPE: PRT  
172 <213> ORGANISM: Artificial Sequence  
174 <220> FEATURE:  
175 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
177 <400> SEQUENCE: 8  
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180 1 5 10 15  
183 Thr Phe Arg Met  
184 20  
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189 <212> TYPE: PRT  
190 <213> ORGANISM: Artificial Sequence  
192 <220> FEATURE:  
193 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
195 <400> SEQUENCE: 9  
197 Lys Gly Leu Asp Gly Ser Leu Gln Thr Ala Ala Phe Ser Asn Leu Pro  
198 1 5 10 15  
201 Ser Leu Phe Asp Ser Gln Trp His Lys Ile  
202 20 25  
205 <210> SEQ ID NO: 10  
206 <211> LENGTH: 9  
207 <212> TYPE: PRT  
208 <213> ORGANISM: Artificial Sequence  
210 <220> FEATURE:  
211 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
213 <400> SEQUENCE: 10  
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216 1 5 .  
219 <210> SEQ ID NO: 11  
220 <211> LENGTH: 13  
221 <212> TYPE: PRT  
222 <213> ORGANISM: Artificial Sequence  
224 <220> FEATURE:  
225 <223> OTHER INFORMATION: Type IX collagen alpha 1 chain peptide  
227 <400> SEQUENCE: 11  
229 Arg Ser Ser Ala Thr Leu Phe Val Asp Cys Asn Arg Ile  
230 1 5 10  
233 <210> SEQ ID NO: 12  
234 <211> LENGTH: 439

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235 <212> TYPE: PRT  
 236 <213> ORGANISM: Artificial Sequence  
 238 <220> FEATURE:  
 239 <223> OTHER INFORMATION: Cartilage oligomeric matrix protein [Fragment] - bovine  
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 243 Asp Gly Val Leu Asn Glu Lys Asp Asn Cys Pro Leu Val Arg Asn Pro  
 244 1               5               10               15  
 247 Asp Gln Arg Asn Thr Asp Gly Asp Lys Trp Gly Asp Ala Cys Asp Asn  
 248               20               25               30  
 251 Cys Arg Ser Gln Lys Asn Asp Asp Gln Lys Asp Thr Asp Lys Asp Gly  
 252               35               40               45  
 255 Arg Gly Asp Ala Cys Asp Asp Ile Asp Gly Asp Arg Ile Arg Asn  
 256               50               55               60  
 259 Pro Val Asp Asn Cys Pro Lys Val Pro Asn Ser Asp Gln Lys Asp Thr  
 260 65               70               75               80  
 263 Asp Gly Asp Gly Val Gly Asp Ala Cys Asp Asn Cys Pro Gln Lys Ser  
 264               85               90               95  
 267 Asn Ala Asp Gln Arg Asp Val Asp His Asp Phe Val Gly Asp Ala Cys  
 268               100              105              110  
 271 Asp Ser Asp Gln Asp Gln Asp Gly Asp Gly His Gln Asp Ser Lys Asp  
 272               115              120              125  
 275 Asn Cys Pro Thr Val Pro Asn Ser Ala Gln Gln Asp Ser Asp His Asp  
 276               130              135              140  
 279 Gly Gln Gly Asp Ala Cys Asp Asp Asp Asp Asn Asp Gly Val Pro  
 280 145              150              155              160  
 283 Asp Ser Arg Asp Asn Cys Arg Leu Val Pro Asn Pro Gly Gln Glu Asp  
 284               165              170              175  
 287 Met Asp Arg Asp Gly Val Gly Asp Ala Cys Gln Gly Asp Phe Asp Ala  
 288               180              185              190  
 291 Asp Lys Val Val Asp Lys Ile Asp Val Cys Pro Glu Asn Ala Glu Val  
 292               195              200              205  
 295 Thr Leu Thr Asp Phe Arg Ala Phe Gln Thr Val Val Leu Asp Pro Glu  
 296               210              215              220  
 299 Gly Asp Ala Gln Ile Asp Pro Asn Trp Val Val Leu Asn Gln Gly Met  
 300 225              230              235              240  
 303 Glu Ile Val Gln Thr Met Asn Ser Asp Pro Gly Leu Cys Val Gly Tyr  
 304               245              250              255  
 307 Thr Ala Phe Asn Gly Val Asp Phe Glu Gly Pro Phe His Val Asn Thr  
 308               260              265              270  
 311 Ala Thr Asp Asp Asp Tyr Ala Gly Phe Ile Phe Gly Tyr His His Ser  
 312               275              280              285  
 315 Ser Ser Phe Tyr Val Val Met Trp Lys Gln Met Glu Gln Thr Tyr Trp  
 316               290              295              300  
 319 Gln Ala Asn Pro Phe Arg Ala Val Ala Glu Pro Gly Ile Gln Leu Lys  
 320 305              310              315              320  
 323 Ala Val Lys Ser Ser Thr Gly Pro Gly Glu Gln Leu Arg Asn Ala Leu  
 324               325              330              335  
 327 Trp His Thr Gly Asp Thr Ala Ser Gln Val Arg Leu Leu Trp Lys Asp  
 328               340              345              350

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331 Pro Arg Asn Val Gly Trp Lys Asp Lys Thr Ser Tyr Arg Trp Phe Leu  
 332 355 360 365  
 335 Gln His Arg Pro Gln Val Gly Tyr Ile Arg Val Arg Phe Tyr Glu Gly  
 336 370 375 380  
 339 Pro Glu Leu Val Ala Asp Ser Asn Val Ile Leu Asp Thr Thr Met Arg  
 340 385 390 395 400  
 343 Gly Gly Arg Leu Gly Val Phe Cys Phe Ser Gln Glu Asn Ile Ile Trp  
 344 405 410 415  
 347 Ala Asn Leu Arg Tyr Arg Cys Asn Asp Thr Ile Pro Glu Asp Tyr Glu  
 348 420 425 430  
 351 Ala Gln Arg Leu Leu Gln Ala  
 352 435  
 355 <210> SEQ ID NO: 13  
 356 <211> LENGTH: 159  
 357 <212> TYPE: PRT  
 358 <213> ORGANISM: Artificial Sequence  
 360 <220> FEATURE:  
 361 <223> OTHER INFORMATION: Odorant-binding protein - bovine  
 363 <400> SEQUENCE: 13  
 365 Ala Gln Glu Glu Glu Ala Glu Gln Asn Leu Ser Glu Leu Ser Gly Pro  
 366 1 5 10 15  
 369 Trp Arg Thr Val Tyr Ile Gly Ser Thr Asn Pro Glu Lys Ile Gln Glu  
 370 20 25 30  
 373 Asn Gly Pro Phe Arg Thr Tyr Phe Arg Glu Leu Val Phe Asp Asp Glu  
 374 35 40 45  
 377 Lys Gly Thr Val Asp Phe Tyr Phe Ser Val Lys Arg Asp Gly Lys Trp  
 378 50 55 60  
 381 Lys Asn Val His Val Lys Ala Thr Lys Gln Asp Asp Gly Thr Tyr Val  
 382 65 70 75 80  
 385 Ala Asp Tyr Glu Gly Gln Asn Val Phe Lys Ile Val Ser Leu Ser Arg  
 386 85 90 95  
 389 Thr His Leu Val Ala His Asn Ile Asn Val Asp Lys His Gly Gln Thr  
 390 100 105 110  
 393 Thr Glu Leu Thr Glu Leu Phe Val Lys Leu Asn Val Glu Asp Glu Asp  
 394 115 120 125  
 397 Leu Glu Lys Phe Trp Lys Leu Thr Glu Asp Lys Gly Ile Asp Lys Lys  
 398 130 135 140  
 401 Asn Val Val Asn Phe Leu Glu Asn Glu Asp His Pro His Pro Glu  
 402 145 150 155  
 405 <210> SEQ ID NO: 14  
 406 <211> LENGTH: 245  
 407 <212> TYPE: PRT  
 408 <213> ORGANISM: Artificial Sequence  
 410 <220> FEATURE:  
 411 <223> OTHER INFORMATION: human collagen type IX NC4 domain  
 413 <400> SEQUENCE: 14  
 415 Ala Val Lys Arg Arg Pro Arg Phe Pro Val Asn Ser Asn Ser Asn Gly  
 416 1 5 10 15  
 419 Gly Asn Glu Leu Cys Pro Lys Ile Arg Ile Gly Gln Asp Asp Leu Pro

**VERIFICATION SUMMARY**

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